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# Learning by Doing - Farmers' Specialized Cooperatives Development in China

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### 1 Introduction

In many of the developing (transition) countries, government is promoting the use of cooperatives as organizations that can help enhance the development of farmers and other communities. Agricultural cooperatives are believed to function as a tool for the government in promoting the economic and social development, in particular by creating employment, generating income, eradicating poverty and strengthen farmers' (market) power within the modern value chain. As for most transitional countries, Chinese government played a primary important role in agricultural cooperatives development. The government attempted to restructure the agro-food system to a modernized and industrialized one by supporting farmer cooperatives and producer organizations. Since the first "Law of Farmer Professional Cooperatives" (FPCs) was enacted in 2007, FPCs could enter into complex contracts and the development of cooperatives entered a new era. In 2003, there were more than 100 thousand producer associations and cooperatives in China (World Bank, 2003). Shen et al (2005) estimated that 2.91 percent of the farmers and about 10 percent of villages in China were members of FPCs in 2003. In June 2010, the number of FPCs was more than 310 thousands, which provided services to about 26 million farm households (covering almost 10 percent of farm households)<sup>1</sup>. According to the insiders, at least one third of those FPCs only exist on the "paper", another one third does not strongly meet the "cooperatives principles", and only last one third of FPCs are functioning properly<sup>2</sup>.

However, agricultural cooperatives may face difficulties if these organizations are established by hierarchical structures such as governments (Golovina and Nilsson, 2009a; 2009b). That is, if the establishment of cooperatives was initiated by the political leadership and organized by government bodies. Previous studies about Russian top—down organized cooperatives by Golovina and Nilsson (2009a; 2009b) reveal that the lack of positive socio-psychological incentives among Russian agricultural producers to join cooperatives are the main reasons for the cooperatives failure in Russia. They noted that these firms are partly financed and supported by government, and the management is recommended by public administration. As a result, the agricultural producers become members of top—down organized cooperatives without having to invest any capital or accepting any other obligations (Franks and Davydova, 2005).

In this essay, our aim is to explain the importance of institutional building, creating incentives and increasing returns, enhance self—enforcing mechanism and establishing a "learning by doing"

<sup>&</sup>lt;sup>1</sup> Source: http://www.chinacoop.gov.cn/HTML/2010/09/27/56932.html

<sup>&</sup>lt;sup>2</sup> Source: http://finance.eastmoney.com/news/1355,20101210109873314.html

institutional environment among farmers and interest groups by observing the agriculture cooperatives development in China. While studies conducted by Golovina and Nilsson (2009a; 2009b) shows that the main reason of coops' failures in the transition countries can be explained by hierarchical processes in the establishment, it is less clear why the top—down process of agriculture cooperatives may face failures which are embedded in their "past"-hierarchical decision making structure; lack of cooperative governance experiences and members "psychological lack of trust in cooperatives".

In recent years, there has been an increased interest in the use of path dependency theory or "history matters"-concepts among social scientists as well as institutional economists. The concept of path dependence originates from the idea that a small initial advantage or a few minor random shocks along the way could alter the course of history (David, 1985). An obvious advantage of such a formal theoretical framework is that it allows to conduct empirical analyses and discerning whether the evidence supported or rejected a claim of the extent and scope of the sway of past (Page, 2006). Meanwhile, the concept of path dependence may help explain why some countries succeed and others do not (Easterly, 2001). In his earlier work, Douglas North suggested that country level of success depends on a proper build—up of institutions, formal rules and laws. In his later work he had become convinced that "the issue of enforcement of property rights is central to credible commitment and a major historical stumbling block to realizing the potential gains from trade and that informal norms of behavior are critical parts of the way institutions affect performance".

In many senses, China's remarkable economic transformation reflects institutional change rather than changes in relative prices and productivity (Krug, 2004). The path and the choices that put in this country there likely will have implications for where its agriculture cooperatives development is going in the next coming years. Chinese way of gradual and experimental reform rather than shock therapy (McMillan and Naughton, 1992), creating reform incentives for different players, most importantly for the local cadres and state entrepreneurs (Rozelle and Swinnen, 2007), enhancing the self–enforcing mechanism and promoting an environment of "learning by doing".

Although it is crucial that the impetus to meet and act as a cooperative must come from the grass roots needs of farmers and interest actors themselves, the government can contribute by creating a supportive institutional environment. The most important issue is that the farmers and other actors must consider themselves to benefit from their memberships in the cooperatives. However the created institutional environment should create the incentives of farmers and different actors to "learn the cooperatives by collaborating".

This paper structured as follows. Background information of cooperatives development in China is presented next. An application of theoretical framework follows and theoretical hypothesis are formulated. The following section presents methodological issues about data collection procedure. Then, the results of the empirical study are presented. The final section presents conclusions.

### 2 Why past is important: the agricultural cooperatives development in China

The economic term of cooperatives is not a completely new concept in China. Its history dates back to the early 20<sup>th</sup> century - before the founding of the communistic republic - when some parts of China experienced grass roots organized cooperatives (Du. 2002). At the beginning of new China, the central government distributed land to poor and landless farmers by gradually confiscated land from landlords and rich farmers. During the early 1950s, various kinds of cooperative organizations were established, motivated and facilitated directly by government, in order to help farmers who lacked the of tools and skills to produce in an efficient way (Hu et al., 2007). In July 1954, the first national congress of China's cooperatives was established under the new name of the All-China Federation of Supply and Marketing Cooperatives and the so called "Cooperative Movement" took place (Guo et al,. 2007). Thereby, the cooperative bodies at all levels were established from the top down and promptly lost their "grass roots" character. Later agricultural production became collectivized and cooperatives used by government to centrally control and manage the production, trade and consumption. The collective farming system remained until the arrival of rural economic reforms in the late 1970s. During this more than 20-years period, the development of cooperatives in China is characterized as "unsuccessful" and collective farming system diminished the productivity due to abuse of the management system and whole organizational system was destroyed. These reasons, in combination with other reasons (such as political dominance of "left" thinking), were a direct obstacle for cooperatives in accomplishing its aims of serving its members.

Since 1978, China has been restructuring its economy from a planned economy towards a market—oriented economy. The earliest reform started from rural area by introducing household responsibility system, to return to family—based production from collective farming system which households suffered most, and that created the grass roots need and pressure at those times. In fact, the decollectivization in China was not a fully top—down political decision and the pressure to shift to household based production systems was strong at the grass roots levels (Rozelle and Swinnen, 2007). There are three fairly distinct time periods when the new rural producers' organizations emerged in China: the self organizing and self managing era; motivating and promoting the coops development periods; and establishing coops law and fast development years (Table 1).

A literature survey of the development of producer organizations after the HRS in China reveals three main corresponding causes for above three distinct time periods development. The first one is that a major problem in the early of 1980s to 1990s was the breakdown of the relationships of the farm with input suppliers and output markets. Farmers make their decisions at household level. They face serious constraints in the accessing essential inputs, such as feed, fertilizer, seed capital, and selling their products. During this periods, producer organizations occurred as associations (*xie hui*) and mostly providing members with technical supports and information. Some regions in China had experienced grass roots producer organization during this period. For example, the first grass roots farmers' organization established in Sichuan province which was a small bee farmer organized bee farmers association in Pi County in 1980. Second period, from the middle 1990s to 2007, Chinese agriculture faced increasing competition in global market and the dramatic change of downstream segments. Producer organization started to carry out economic functions. The term "cooperatives" is beginning to

dominate and even it has a negative connection in the rural China related to the more than twenty years of "collective farming memory" which marked the monopolistic position of government owned commercial organizations operating as "cooperatives". While the term "associations" (xie hui) can be formal or informal literally in Chinese concept and covers every kind of producer organizations. However, the term "cooperative" (hezuo she) is more restricted. Therefore, the western term of agricultural cooperatives formulated as farmer professional cooperatives (nongmin zhuanye hezuo she). The main problem during this period was that those associations and FPCs have not legal identities and excluded from business contract. Some scholars such as Zhou (2004) and Bijman et al (2007) hold a view that Chinese government was reluctant to promote cooperatives and other producer organizations during this period and say that the development of FPCs in China has not been substantial. Zhou (2004) concluded that the reasons are farmers might still have bitter memories from past experiences with cooperatives and the collective farming systems and Chinese farmers are experimenting with a wide range of collaborative arrangements, which was "learn cooperatives by collaborating" process. The last period, after enacting FPCs Law in 2007, FPCs got legal identity and sufficient support both from government (top-down) and farmers (grass roots).

**Table 1.** Basic information of the agricultural cooperatives development in China

Development periods before and after the	Main characters:			
HRS reforms:				
(1) 1900-1949 Grass root development	- Initiated by farmers, members control			
periods.	and members benefit			
	- Members have control rights, voting			
(2) 1947 – 1957 Still grass root development	rights and independent management			
periods, however motivated and facilitated	- Members have no control and voting			
by government	rights, state running business			
(3) 1958 – 1978 Collective farming periods.				
(1) Self organizing and self managing era -	<ul> <li>Providing members with technical</li> </ul>			
beginning of 1980s to the first half of 1990s	service, technical training, providing			
<ul> <li>new rural producers organizations</li> </ul>	storage and market information			
emerged from grassroots demand.				
(2) Motivating and promoting the FPCs	- Members start to invest and control			
development periods - From the second half	FPCs, have certain degree of voting			
of 1990s to 2006.	rights, motivated and promoted by			
	government.			
(3) Establishing FPCs law and fast	<ul> <li>Members have certain degree of</li> </ul>			
development years - after 2007, FPCs got	controlling and voting rights. FPCs			
legal identities and start to involve in	receive sufficient support from			
complex contract.	government.			

### 3 Application of path dependence theory

A general definition of path dependence is that current and future decisions, actions, or states depend on the path of previous decisions, actions, or states (Page, 2006). In this sense, individual agents make their decisions and choices on the basis of their "mental models" which are formed from their previous experiences. They build their mental model partly through their "local" experiences and therefore also vary widely with different environments. In fact, individuals agents do learn and changes in mental models originate from outcomes of competitions with scarcity. This conception of "learning" path dependence, in which preceding a new mental model in a particular environment (competition with scarcity), is well captured by the idea of increasing return. There are four related causes of path dependence: increasing returns, self-reinforcement, positive feedbacks, and lock-in (Page, 2006). Those four causes are related, but conceptually different. Increasing return means that the more a choice or an action is taken, the greater is its benefits. In here, the rate of taking an action will reflect the intensity of competition among the economic agents. According to North, competition is a ubiquitous consequence of scarcity and hence agents in an economy will engage in learning (or taking a new action) to survive. Self-reinforcement means that making a choice or taking an action puts in a place forces or complementary institutions that encourage that choice to be sustained. It is crucial to emphasize the role of institutions in self-reinforcing process. Institutions are the rules of the game which are composed of formal rules (law and regulations), informal rules (norms, believes and religions), and the enforcement characteristics of both. North states, once in place, institutions are hard to change (and competition is the key to institutional change), and they have tremendous effect on the possibilities for generating sustained economic growth. Individuals and organizations adapt to existing institutions. North observes if the institutional matrix creates incentives for piracy, then people will invest in becoming better pirates. Positive feedbacks illustrates that an action or choice creates positive externalities when that same choice is made by other agents. Positive feedbacks processes can be described as network externalities and economies of scope. Finally, lock-in means that one choice or action becomes better than any other one because a sufficient number of agents have already accepted that choice or action (Page, 2006).

If we put a logical structure on the possible development of FPCs history after the HRS reforms in China, path dependence theory gives a primary general framework to better understand those above mentioned history dependence. In the late of 1970s, Chinese government had introduced HRS to rural agricultural production. This basic "rule of the game", individual decision – making of family farmers, had pushed up the agriculture productivity by stimulating farmers' incentives. However the breakdown of the relationships in the farm with input suppliers and output markets brought some farmers into a group to share the information among group in a low cost. This kind of small and random action or decision initiated by those active agents, who are active enough to survive in a given environment, had a significant impact on realizing first step "increasing returns". Facing the pressure from down stream and global market in the middle of 1990s, Chinese farmers realized simply sharing the information in a farm association was not sufficient for them to survive. Therefore the second new action or choice was needed in order to survive. Given the early market condition in China, only the government could help farmers to organize themselves to play with "dragon head" down

streams<sup>3</sup>. As Williamson (2000) stated institutional transformation goes beyond the rule of the game to include the play of the game (contract). In order to allow the FPCs enter into contract and formal business, complementary institutions should be established which could encourage the "initial" action or choice to be sustained. As a consequence, the FPCs Law was enacted in 2007.

In order to better investigate the development of FPCs, we developed Figure 1 (inspired by Figure 1 in Sydow et al (2009, pp 692) who modeled the Constitution of an Organizational Path). Following Sydow et al., we subdivided the whole process of evolving path dependence into three stages governed by four different "path dependence" causes.

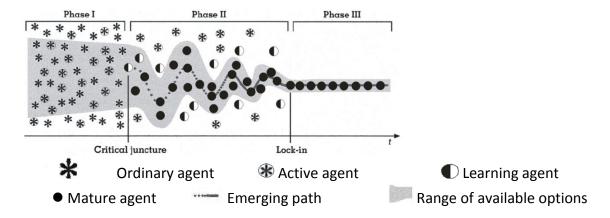
Phase I – the "Open Option"-phase - is characterized by a situation in which all agents have the same opportunities. We assume that there are two different main groups of agents (where agents are farmers in our case): "ordinary agents" and "active agents". The main difference between these two agent types is that active agents are "active" in the terms of taking new action or choice in a given environment (this study mainly focus on active agents). Once a decision or choice is made by active agents, this choice may create the increasing returns. This moment would be entering into the dynamics when the increasing returns process start to create "critical juncture", and it indicates the end of the Phase I. In here, the process or direction of critical juncture might be grass roots, top-down, or both ways.

In phase II – the "Learning by Doing"-phase – a new regime takes the lead which is building proper institutional environment for self-reinforcing processes. A dominant action pattern is likely to emerge, where active agents convert themselves from "active" to "learning" and from "learning" to "mature" agents which mainly derived by positive feedbacks or network externalities, which the renders of the whole process more and more irreversible. Once in place, institutions are hard to change, the range of option narrows and it becomes progressively difficult to reverse the initial action or choice – this creates the evolving of path processes.

In the last stage – phase III or the "Lock-in"-phase – further consolidation takes place, which eventually leads to a lock-in. The dominant decision pattern becomes unchanged and gains a deterministic character. When one particular action or choice has become the predominant mode and the flexibility has been lost. Therefore, once in the locked-in phase, the system may have created a potential new "inefficient" path, because it loses its capability to adopt better alternatives (Sydow et al, 2009).

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<sup>&</sup>lt;sup>3</sup> Agricultural processors are called dragon head firms in China because they are considered the key to leading small farmers on the road to prosperity in the 1990s. Here "dragon head" down streams include both processing firms and supermarkets.



**Figure 1.** Theoretical Model for Analyzing Top-down Cooperatives Development by Applying Path Dependence Theory (inspired by Figure 1 in Sydow et al (pp 692).

Based on the discussion above, we formulate the following hypotheses:

H1: Increasing returns and "critical juncture" can occur when agents or members of cooperatives can change their "characters"

H2: Members of FPCs get a better view on cooperatives as they get knowledge or experiences "leaning by doing"

## 4 Methodology and data description

To test the hypothesis formulated in this paper, a survey covering 41 agricultural cooperatives and 36 village communities was conducted during July to September 2009 in the Zhejiang and Sichuan provinces in China. There are three level of cooperatives exist in China according to its operating size, importance in local development, service capability, product quality, and good democratic governance which was standardized and authorized by local governments: provincial level demonstration cooperatives (shengji shifan hezuoshe); county level demonstration cooperatives (shiji shifan hezuoshe); and ordinary cooperatives. We have controlled the balance in those three levels cooperatives among 41 interviewed cooperatives. To approach the objective of this study, two different questionnaires were developed for directors of coops and village headman respectively (which both are assumed to represent "active agents"), their main roles and their incentives of establishing or motivating coops. All of surveyed coops are "service" oriented and specialized in vegetable, horticulture (including fruit) and livestock (including aquatic products) productions. The survey showed that, in general, most of the coops are small and local, and in an early development stage. Table 2 indicates that the decision regarding to members join or leave FPCs is mainly decided by the board of directors. More than half of the FPCs' applies a closed membership policy.

Table 2. Summary statistics of FPCs in Zhejiang and Sichuan province (in 2008)

	Number	Share (%)		
Who make the decision regarding to members join to FPCs or leave the coops (N=41)				
members congress	5	12.2		
board of directors	36	87.8		
coops director	0	0		
Coops membership policy (N=41)				
Open	18	43.9		
Closed	23	56.1		
	Average	Standard deviation	Min	Max
Year of established of FPCs (N=41)	2005.7	1.8	2001	2008.6
Total number of original FPCs members (N=41)	167.3	420.1	5	2500
Total number of current FPCs members (N=41)	437.1	668.4	25	3500
The number of meetings hold by all FPCs members (N=41)	3.5	2.9	1	16
The number of meetings hold by FPCs directors of board members (N=41)	10.8	13.2	1	50
The number of meetings hold by FPCs supervisor board members (N=40)	10.5	13.6	1	50

Table 3 shows some descriptive statistics of the 36 surveyed villages. It can be noted that each village has on average 1.8 coops and 2 various farm organizations except coops. It is clear that there are no agricultural enterprises or firms in village level among those villages. Meanwhile, most of the farmers are low educated and still mainly occupied in agricultural sector.

Table 3. Summary statistics of surveyed villages in Zhejiang and Sichuan province (in 2008)

General	Average	Standard	Min	Max
		deviation		
Number of households in the village (N=36)	624.9	375.2	45	1478
Total population (N=36)	2163.8	1191.3	240	4689
Average income 2008 (N=36)	6703.1	2557.2	2000	12000
Number of various farm organizations (N=36)	2.0	3.9	0	17
Number of farm cooperatives (N=36)	1.8	1.2	1	5
Coops member farmers in the village, % (N=35)	31.9	23.9	1	80
Agriculture farmers in the village, %(N=36)	53.1	21.4	20	90
	Number	Share		
Average education level (N=36)				
Illiteracy	0	0		
Primary school	11	30.6		
Junior high school	25	69.4		
High school, vocational technical schools	0	0		
College and above	0	0		
Main agriculture products*				
Fruit	22	-		
Horticulture	4	-		
Livestock	7	-		
Vegetable	17	-		
Aquatic products	2	=		
Others	7	-		

<sup>\*</sup> Sums to more than 36 since some villages has several main products

In order to test the hypothesis, the surveyed coop directors and village headmen (community leaders) were asked a number of questions related to their past and current positions, their roles in within the coops development, and their views on which types of "agents" that most easily establish coops. Knowledge, which is located and embedded in individual agent, is important to analyzing the divergence of interests in a given environment. The divergence of interests between different agents is problematic from a "path dependence" knowledge perspective. Hendrikse et al. (2004) has described the path dependence characters of knowledge as tacit knowledge, which is personal, implicit, and hard to codify and to express in the formality of language. They also indicated that it is costly to transfer to outside groups and usually resides with limited number of individuals. Therefore, at the early stage, it is less costly to transfer the knowledge by changing "active" agent's character or state (occupation in here) rather than transfer the knowledge from agent to agent. The frequency of meeting between board directors and members of cooperatives is a main indicator for cooperatives development, also a main distinguished character of cooperatives, because members are the owners of the

cooperative, meanwhile members' interests are more and more diverse (Hendrikse et al., 2004). Most importantly, communication itself is a learning process.

#### 5 Results

Table 4 shows that more than 60 percent of the directors of coops former positions were village cadre and rural agriculture technical staff. Few off-farm employees and private business owners have became directors of coops. However, among the 41 surveyed directors, 7 were previously specialized farmers and 7 were running small businesses (part time farmers). Most of those directors are the first generation of coops directors which indicate they are the initiators or original opinion leaders of coops establishment.

**Table 4.** Summary statistics: interviewed coop directors

	Number	Share (%)		
Former occupation (N=41)				
Off-farm employee	1	2.4		
Doing small businesses	7	17.1		
Do business (or running private company)	0			
Farmer	7	17.1		
Village cadre	13	31.7		
Others (mainly rural agricultural technical	13	31.7		
staff)				
Current co-occupation (N=41)				
Off-farm employee	0	0		
Doing small business	0	0		
Do business (or running private company)	1	2.4		
Farmer	26	63.4		
Village cadre	7	17.1		
Others (mainly rural agricultural technical	7	17.1		
staff)				
	Average	Standard	Min	Max
		deviation		
The number of holding shares in coops	20.2	19.1	0	80
(N=40)				

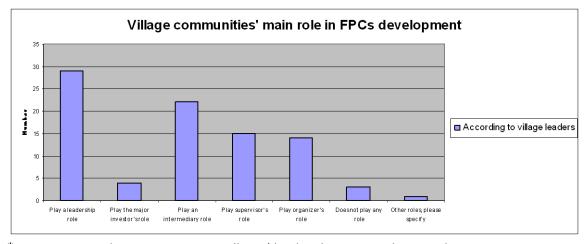
Among those directors, more than 63 percent of them are the agriculture farmers at the same time who are involved and specialized in either production or marketing. Almost the entire directors whose former occupations are off-farm employee and small business runners became full time "specialized" farmers. Relatively less change happened among the directors whose original positions are village cadres and rural agricultural technical staff. More than half of those directors still maintained their former positions in public or government administrating sectors. Meanwhile, they are the main shareholders within the coops.

A similar investigation was conducted at village leader's level. Table 5 shows that the possibilities to become a village leader and do not seem to be strongly connected with former background. However, the possibility seems to increase if for former village cadres and for those still involved agriculture. Among the 36 village headmen, more than 60 percent of had participated in coops which correspond to 22 village headmen. Among those 22 village leaders, 13 are the core members and 12 are holding shares within the coops.

**Table 5.** Summary statistics: village leader

	Number	Share (%)		
Former main occupation (N=36)				
Off-farm employee	3	8.3		
Doing small businesses	8	22.2		
Do business (or running private company)	0	0		
Farmer	11	30.6		
Village cadre	13	36.1		
Others	1	2.8		
Member status (N=36)				
Vice president of coop (core member)	1	2.8		
Member of director (core member)	6	16.7		
Director of supervisor (core member)	3	8.3		
Vice director of supervisor (core member)	1	2.8		
Supervisor (core member)	2	5.6		
Ordinary member	7	19.4		
Others	2	5.6		
	Yes	No		
	Number	Number		
	(Share, %)	(Share, %)		
Is your current main occupation a village headman? (N=)	36 (100)	0 (0)		
Did you join coops? (N=36)	22 (61.1)	14 (38.9)		
Whether holding shares? (N=22)	12 (54.5)	10 (45.5)		
	Average	Standard deviation	Min	Мах
The number of holding shares in coops (N=12)	105.6	287.2	1	1,000
Amount per share (Yuan) ( N=12)	18145.9	57335.1	1	200,000
Holding share ratio in total coops share, % (N=5)	12.2	8.8	0.8	20

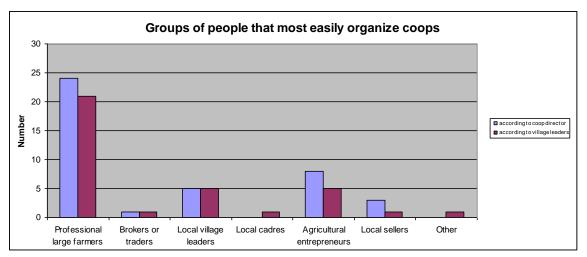
The relationship between local community leaders and coops are investigated next. Figure 2 reveals that the community leaders believe they have the main roles for leadership, intermediary work, supervision and organization within the coops development. During the discussions with the village leaders, one interesting phenomenon was that some regions received "political" indicators from the "top" administration which required the number of coops should be newly established and the number of farmers should be covered within the coops. This became of the main indicator for village leaders or local public administrators to show their career "capability". To a certain degree, this kind of "political" needs also created and facilitated the "learning" process from other region or other coops experiences among the public administrating and local community leaders.



<sup>\*</sup> Sums to more than 36 since some villages' leaders have several main roles.

Figure 2. Village communities' main role in FPCs development

It is not clear if the current view or expectation influences the future trend of development. The data in Figure 3 shows that both coops directors and village leaders believe professional large farmers are the main engines in creating or organizing coops. However, they have different views regarding the second, third and forth order "engines". Coops directors experienced that agricultural entrepreneurs are the main organizers in the second and third order, followed by local village leaders. On the contrary, village leaders put themselves in the second most important position, followed by agricultural entrepreneurs and local agricultural technical staff as the first four important potential organizers in the respect of establishing coops.



**Figure 3.** Groups of people that most easily organize coops according to FPCs directors and village leaders.

The survey results show that all PFCs members annually organize more than 3 meetings. Board of directors and supervisors had holed more than 10 meetings in 2008 (Table 2). Over all, the frequency of meetings is not low. Figure 4 shows that the coops' future development issue is number one discussed topic in both all FPCs members meetings and board directors meetings. It is not difficult to understand the technical training and production management issue evince a second and third most discussed subjects in all FPCs members meetings, because coops are providing most of the technical services and production management issue is one of the biggest challenges for ordinary members. According to the data, board of supervisors undertakes the task of supervising annual residual distributions and participating coops' future development discussions. In here, it is necessary to mention that the issue of "going out and learning from neighbor region cooperative development experiences" is included within the topic of coops' future development and significant number of cooperatives have discussed this issue and applied in their development practice.

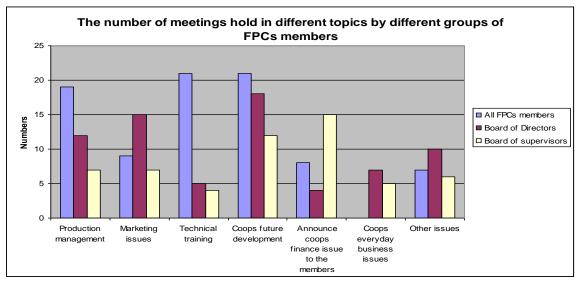


Figure 4. The numbers of meetings hold in different topics by different groups of FPCs members.

## 6 Conclusions

The aim of the study is to explain the importance of institutional building, creating incentives and increasing returns, enhancing self—enforcing mechanism and establishing a "learning by doing" institutional environment among farmers and interest groups by observing the agriculture cooperatives development in China. The findings indicate in certain degree that China has succeeded in PFCs development in the respects of institutional buildings and creating incentives among different agents. In general, village cadres and local agricultural technicians are the most important initiators and organizers of FPCs. Local businessmen and specialized professional farmers showed up as the second important players in PFCs development in Zhejiang and Sichuan provinces in China. These findings provide arguments for the rejection of Chinese agricultural cooperatives are purely organized from top-down processes. However, these findings also confirmed that Chinese governments are still the essential initiators and motivators of FPCs establishment and development.

A major reason is that Chinese FPCs development is still at its early stage of development, which is defined as "leaning by doing" or "learning cooperatives by collaborating" stage. At this stage, the local experienced cadres and technically skilled bureaucratic officials are allowed to join the business community and FPCs development without having to quit their government positions. These "bureaucratic" agents had a positive impact on China's FPCs development and less costly to organize small farmers, as it stimulated interest of those cadres in the local economic growth and new FPCs development.

Both formal and informal institutions are fundamental to the success of cooperatives. However, building self-enforcing mechanism within this new type of organization is the heart of success. To some extent, it is related to the cooperative's existence and members should benefit from joining cooperatives. More seriously, however, it is crucial whether the agricultural producers in the long — run future will establish agricultural cooperatives on their own initiates as their

experiences from "learning by doing". During this self-enforcing mechanism building processes, communication is an essential activity and it facilitates the knowledge transfer, build trust among members, readiness to collective actions, flourish relationships, and bring the members' attitude towards solidarity, equity, and democracy.

Pursuing the objectives of building grass roots cooperatives, one element of this transformation (self-enforcement mechanism building) is that the government should step back from active involvement and control over FPCs economic activities and confines itself to a role of regulating and supervising the operation of markets. However, path dependency "habits", which has been developed through years of active initiators and motivators in the local economic activities, will not disappear easily. It needs those non - "bureaucratic" agents to be mature enough to take an active position and to initiate "increasing returns" in the FPCs development and to realize "positive feedbacks" in the long – run future.

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